Page 2 of 12

Claim Listing

This listing of claims will replace all prior versions, and listings, of claims in the

application:

1. (previously presented) A network interface, comprising:

a direct memory access unit; and

circuitry to:

receive and transmit network data;

maintain a set of statistics metering operation of the network interface, the

set of statistics including at least one selected from the group of: (1) a number of bytes

received, and (2) a number of packets received;

receive data specifying a time interval to perform a direct memory access

transfer of the maintained set of statistics to a host processor memory; and

initiate a direct memory access transfer of the set of statistics in

accordance with the received data specifying the time interval.

2. (previously presented) The network interface of claim 1, wherein the set of

statistics comprises each of the following: a number of packets received by the

interface, a number of bytes received by the interface, a number of packets transmitted

by the interface, and a number of bytes transmitted by the interface.

3. (currently amended) The network interface of claim 2, wherein the circuitry

comprises circuitry to include a timestamp with the direct memory access transfer of the

Page 3 of 12

set of statistics, the timestamp indicating a time at which the set of statistics were

captured.

4. (previously presented) The network interface of claim 2, wherein the circuitry

comprises circuitry to include a sequence count with the direct memory access transfer

of the at least one statistic, the sequence count sequentially numbering successively

DMA-ed sets of the statistics.

5. (previously presented) The network interface of claim 1, wherein the set of

statistics comprises multiple RMON (Remote Monitoring) statistics.

6. (previously presented) The network interface of claim 1, wherein the circuitry

comprises circuitry to initiate direct memory access transfer of received network data.

7. (original) The network interface of claim 1, wherein the network interface

comprises a framer.

8. (original) The network interface of claim 7, wherein the network interface

comprises a Media Access Controller (MAC).

9. (original) The network interface of claim 1, wherein the network interface

comprises a PHY.

Page 4 of 12

10. (original) The network interface of claim 1, further comprising circuitry to

configure the circuitry to initiate direct memory access transfer.

11. (cancelled)

12. (original) The network interface of claim 10, wherein the circuitry to configure

comprises at least one register.

13. (original) The network interface of claim 10, wherein the circuitry to configure

comprises circuitry to determine configuration information from received packets.

14. (original) The network interface of claim 13, wherein the circuitry to

determine configuration information from received packets comprises circuitry to

intercept packets traveling along a transmit path.

15. (original) The network interface of claim 1, wherein the direct memory

access unit comprises circuitry to notify a processor of completion of a transfer.

16. (currently amended) A method, comprising:

receiving data, at a network interface, specifying a time interval to perform a

direct memory access transfer of a set of statistics metering operation of the network

interface from the network interface to a memory accessed by at least one processor;

Page 5 of 12

maintaining $\underline{\text{the set of}}$ statistics $\underline{\text{metering operation of the network interface}}$ [[,]]

at [[a]] the network interface, metering operation of the network interface; and

transferring, by direct memory access, from the network interface to [[a]] the memory accessed by at least one processor, the <u>set of</u> statistics metering operation of the network interface based on the data specifying the time interval.

17. (original) The method of claim 16, further comprising:

transferring packets from the network interface to the memory by direct memory access.

- 18. (previously presented) The method of claim 16, wherein the comprise RMON (Remote Monitoring) statistics.
- 19. (previously presented) The method of claim 16, further comprising transferring at least one of a timestamp and a sequence number sequentially numbering successively DMA-ed sets of the statistics with the statistics.
- (original) The method of claim 16, wherein the network interface groups digital bits into frames.
- 21. (original) The method of claim 16, further comprising configuring the transfer of the at least one of the statistics.

Page 6 of 12

22. (previously presented) The method of claim 21, wherein the configuring

comprises identifying at least one memory location to receive transferred data.

23. (original) The method of claim 21,

further comprising receiving a packet at the network interface; and

wherein the configuring comprises configuring based on data included in the

packet.

24. (original) The method of claim 16,

wherein the transferring into the memory comprises transferring into a cache

memory of at least one of the at least one processors.

25. (original) The method of claim 16,

further comprising signaling at least one of the at least one processors when the

transfer completes.

26. (currently amended) A program product, disposed on a computer readable

medium, comprising instructions for causing programmable circuitry of a network

interface to:

access data, at the network interface, specifying a time interval to perform a

direct memory access transfer of a set of statistics metering operation of the network

interface from the network interface to a memory accessed by at least one processor;

maintain the set of statistics metering operation of the network interface; and

Page 7 of 12

initiate transfer, by direct memory access, from the network interface to $\underline{\text{the}}$

memory accessed by at least one processor, the statistics metering operation of the

network interface based on the data specifying the time interval.

27. (original) The program of claim 26, further comprising instructions for

causing the programmable circuitry to:

transfer packets from the network interface to the memory by direct memory

access.

28. (previously presented) The program of claim 26, wherein the statistics

RMON (Remote Monitoring) statistics.

29. (original) The program of claim 26, further comprising instructions for

causing the programmable circuitry to include in the direct memory access transfer at

least one of a timestamp and a sequence number with the at least one of the statistics.

30. (original) The program of claim 26, further comprising instructions for

causing the programmable circuitry to configure the transfer of the at least one of the

statistics.

31. (previously presented) The program of claim 30, wherein the instructions for

causing the programmable circuitry to configure comprise instructions for causing the

Page 8 of 12

programmable circuitry to configure at least one memory location to receive transferred

data.

32. (original) The program of claim 30, further comprising instructions for

causing the programmable circuitry to configure the transfer based on contents of

a received packet.

33. (original) The program of claim 26, further comprising instructions for

causing the programmable circuitry to signal at least one of the at least one processors

when the transfer completes.

34. (currently amended) A system, comprising:

at least one processor;

memory operationally coupled to the at least one processor;

a network interface, comprising:

a direct memory access unit configured to be operationally coupled to the

memory; and

circuitry to:

access data specifying a time interval to perform a direct memory

access transfer of multiple RMON (Remote Monitoring) statistics metering

operation of the network interface to the memory;

maintain the multiple RMON (Remote Monitoring) statistics

metering operation of the network interface; and

Page 9 of 12

initiate direct memory access transfer of multiple ones of the RMON

statistics metering operation of the network interface based on the data specifying the

time interval.

35. (original) The network interface of claim 34, further comprising circuitry to

configure the circuitry to initiate direct memory access transfer.

36. (original) The network interface of claim 34, wherein the circuitry comprises

circuitry to determine configuration information from packets received by the network

interface.

37. (original) The network interface of claim 34, further comprising circuitry,

operationally coupled to the direct memory access unit, to initiate transfer of packets

received via the network connection.

38. (previously presented) The network interface of claim 34, wherein the

circuitry to initiate direct memory access transfer comprises circuitry to include at least

one of a timestamp and a sequence number sequentially numbering successively DMA-

ed sets of the statistics with the transfer of the multiple ones of the statistics.